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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,066

10/24/2006

Ulrike Wachendorff-Neumann

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06/16/2009

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EXAMINER

PIHONAK, SARAH

ART UNIT

PAPER NUMBER

1617

MAIL DATE

DELIVERY MODE

06/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,066	<b>Applicant(s)</b> WACHENDORFF-NEUMANN ET AL.	
	<b>Examiner</b> SARAH PIHONAK	<b>Art Unit</b> 1617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4 and 13-16 is/are pending in the application.  
     4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 & 15-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### ***DETAILED ACTION***

This application is a 371 (national stage application) of PCT/EP04/10830, filed on 9/28/04.

### ***Priority***

This application was filed on 10/24/06 and claims foreign priority to Application No. 103-47-090.5, which was filed on 10/10/2003 in Germany. As this application is a 371 of PCT/EP04/10830, the effective U.S. filing date and priority date of this application is 9/28/04. A certified copy of the foreign application has been received.

### ***Response to Applicants' Arguments***

1. In the reply filed on 3/13/2009, the Applicants cancelled claims 1-3, and 5-12, and added new claims 15-16. New claims 15-16 are drawn to a composition comprised of N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide and a triazole of formula (III). As claims 15-16 are supported by the instant specification and are drawn to an elected invention, entry of these claims for examination of patentability is allowed. Claims 4 and 13-16 remain pending. Claims 13-14 were previously withdrawn in the office action dated 10/15/2008, as they are directed to a non-elected invention. Claims 4 and 15-16 were examined for patentability.

Previously, claims 1-14 were pending; claims 6-14 were withdrawn as being directed to a non-elected invention, in the office action dated 10/15/2008. Claims 1-5 had been previously rejected under 35 USC § 103 over Bruns et. al. (US PG Pub 2002/0198222)

in view of Dunkel et. al. (DE 10215292), in the action dated 10/15/2008. Claim 5 had been objected to and had not been treated further on the merits.

2. The Applicants argument, filed on 3/13/2009, regarding the rejection of claims 1-5 under 35 USC § 103 was fully considered and found not persuasive. The rejection of claims 1-3, and 5, as they were cancelled by the Applicants, is considered moot. In the filed reply, the Applicants stated that Bruns et. al. (US PG Pub 2002/0198222) does not teach the combination of the carboxamide compound, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with the elected compound of formula (III), tebuconazole. The Applicants argued that Bruns et. al. teaches a combination of a structurally different carboxamide with triazoles such as tebuconazole. This argument is found not persuasive, as Bruns et. al. teaches that carboxamides can be combined with compounds such as tebuconazole for a synergistic microbiocidal effect (p. 1, paragraph [0001], and p. 4, paragraphs [0080, 0082, and 0088]. While Bruns et. al. does not teach combination with N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, the carboxamides taught by Bruns et. al. and the instantly claimed compounds both possess activity as microbiocidals and fungicides. Dunkel et. al. teaches the elected carboxamide, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide (p. 19, compound 11 in table). As Bruns et. al. teaches the combination of microbiocide carboxamides with tebuconazole, and Dunkel et. al. teaches the elected microbiocidal compound N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, it would have been prima

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facie obvious for one of ordinary skill in the art at the time of the invention, to substitute the carboxamides taught by Bruns et. al. for the specific carboxamide taught by Dunkel et. al. The instantly claimed carboxamide, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, and the carboxamides taught by Bruns et. al. both possess microbiocidal activity. Therefore, it would have been obvious to substitute one carboxamide for the other, with a reasonable expectation of success, as both compounds function as microbiocides. As such, the initial rejection of claims 1- 5 under 35 USC § 103 over Bruns et. al. in view of Dunkel et. al. (DE 10215292 patent application) is found to be proper, and is maintained. This rejection will be restated below for the rejection of claim 4, including the rejection of newly added claims 15-16. The initial objection to claim 5, for being in improper dependent form, is withdrawn, as the claim was cancelled by the Applicants. Claims 1-3 have also been cancelled by the Applicants.

3. In the reply filed on 3/13/2009, the Applicants argued that the elected compound, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, has a synergistic microbiocidal effect when combined with triazole compounds of formula (III), such as the elected triazole, tebuconazole. The Applicants assert that Bruns et. al. does not teach or suggest that a synergistic effect results from combination of the elected N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with triazoles of formula (III). This argument has been fully considered and is not found persuasive. While it is acknowledged that Bruns et. al. does not teach combination of the elected carboxamide

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with triazoles of formula (III), such as tebuconazole, Bruns et. al. does teach combination of other carboxamides with tebuconazole. Dunkel et. al. teaches the instantly claimed compound, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide. While the carboxamides taught by Bruns et. al. are structurally different from the instantly claimed carboxamide, both carboxamides function as microbiocides; therefore, it would have been obvious to substitute the carboxamides taught by Bruns et. al. for the instantly claimed carboxamide, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide. Additionally, the amended instant claims are not directed to a synergistic combination. The current instant claims are drawn to a composition comprised of the elected compound, N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, with triazoles of formula (III), such as the elected species, tebuconazole. The instant claims as currently stated do not cite a synergistic combination of the compounds.

While the Applicants provide evidence in the specification and in the reply filed on 3/13/2009 of a synergistic effect of the combination of N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with compounds of formula (III), it is noted that the claims are directed to a composition comprised of the specific carboxamide and compounds of formula (III). Thus, from the instant claims, it is implied that any combination of the elected carboxamide and compounds of formula (III), in any ratio, would result in a synergistic effect. However, this is not supported by the data presented in the specification. Particularly, it is noted that, on p. 69 of the

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specification, lines 20-23, it is stated "If the active compounds in the active compounds combinations according to the invention are present in certain weight ratios, the synergistic effect is particularly announced. However, the weight ratios of the active compounds in the active compound combinations can be varied within a relatively wide range". This statement is followed by a table showing preferred mixing ratios of the specified carboxide with compounds of formula (III). However, the instant claims do not reflect these ratio ranges. The instant claims therefore imply that any combination of the specific carboxamide with compounds of formula (III) results in a synergistic effect. As Bruns et. al. teaches that combination of a fungicidal carboxamide with various compounds, including compounds of formula (III), such as tebuconazole, commonly result in synergistic microbiocidal effects, the instant claims, as currently written, do not constitute unexpected results or advantages over the prior art.

The initial rejection of claims 1-5 is maintained. New claims 15-16 are added; a new rejection of claims 1-5 and 15-16 is set forth in this office action, due to the Applicants addition of claims 15-16.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Claims 4 and 15-16 were examined.
6. Claims 4 and 15-16 are rejected.

***Claim Rejections-35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

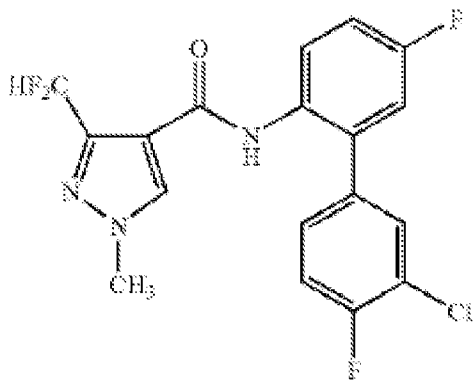


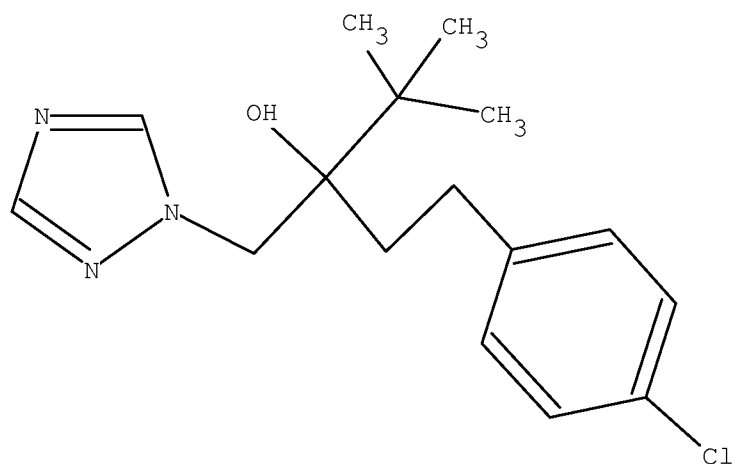
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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 4 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruns et. al., US PG Pub 2002/0198222, in view of DE 10215292 application, Dunkel et. al. The Dunkel et. al. reference and the reference of Bruns et. al. were previously submitted on the IDS filed on 3/30/07. This IDS was also previously considered in the office action dated 10/15/2008.

11. The current instant claims cite a composition comprised of the carboxamide N-(3', 4'-dichloro-5-fluoro-1,1'-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide (1-1), with a compound of formula (III). The Applicants had previously elected tebuconazole as a compound of formula (III), for the election requirement. The structures of the carboxamide (1-1) and tebuconazole are shown below:





Bruns et. al. teaches the combination of microbiocidal carboxamides with additional active agents, which includes tebuconazole (p. 1, paragraph [0001], and p. 4, paragraphs [0080, 0082, and 0088]). Specifically, Bruns et. al. teaches that the combination of the carboxamides with co-components, such as tebuconazole, can be used to broaden the microbiocidal activity, and also help reduce the development of resistance. Furthermore, Bruns et. al. teaches that synergistic microbiocidal effects often result from such a combination (p. 4, paragraph [0080]).

Bruns et. al. does not teach the carboxamide (1-1); however, this compound is taught by Dunkel et. al. (p. 19, compound 11 in table). It would have been obvious for one of ordinary skill in the art, at the time of the invention, to substitute the carboxamides taught by Bruns et. al. for the instantly claimed carboxamide, compound (1-1), as both compounds have microbiocidal activity. While the carboxamides taught by Bruns et. al. are structurally different from the instantly claimed carboxamide, both function as microbiocides and fungicides. Therefore, it would have been prima facie obvious to substitute the carboxamides taught by Bruns et. al. for the instantly claimed carboxamide, to arrive at the instantly claimed combination of compound (1-1) with

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triazoles such as tebuconazole, as both carboxamides act as fungicides. A reasonable expectation of success would have been expected from such a substitution, as both types of carboxamides function as microbiocides.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 8:00 AM - 6:30 PM EST, with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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S.P.

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617